

**WHAT IS CLAIMED IS:**

1. A method for the allocation of access to a broadcasting medium by several stations, the method comprising the following steps:
  - a) encoding the identifier  $I$  of each of the stations, on a number  $n$  of bits  $b_1, b_2, \dots, b_n$ , using two symbols corresponding respectively to a reception state and to a transmission state;
  - b) for any unspecified station  $S_i$ , during an attempt to make transmission, starting at a given identification slot,
    - b.1) for  $i$  varying from 1 to  $n$ ;
      - b.1.1) if the value of  $b_i$  is equal to the symbol corresponding to the reception state, the station  $S_i$  receives during the slot  $k+i-1$ :
        - if it detects a signal sent by another station it considers itself not to be chosen;
        - if it detects nothing, it continues to scan the bits  $b_i$ ;
      - b.1.2) if the value of  $b_i$  is equal to the symbol corresponding to the transmission state, the station transmits during the slot  $k+i-1$ ;
    - c) allocating the medium to the station that has performed the step b.1) without receiving the transmission symbol.
2. The method according to claim 1, comprising a step b.0) preliminary to the step b.1) for the transmission of the transmission symbol by the station  $S_i$  and wherein the steps b.1), b.1.1), b.1.2) may be carried out on identification slots varying from  $k+1$  to  $k+n$ .
3. The method according to claim 1, using binary encoding and the reception operation receive 1 when a station detects a signal coming from another station and receive 0 when it receives no signal and the send 1 operation when the station transmits a signal in a given slot.
4. The method according to claim 1 using an identification number taken in an interval  $[0, N-1]$  with  $N=2^n$ .
5. The method according to claim 4 wherein the identification numbers are made to vary by the application of a permutation of the interval.

6. The method according to claim 1, wherein the broadcasting medium is a radio station and wherein the stations are transmitter-receiver units.
7. A method for the allocation of access to a broadcasting medium by several stations  $S_i$ , wherein the stations are provided with a digital processing circuit adapted to execute the steps of a method comprising the following steps :
  - a) encoding the identifier  $I$  of each of the stations, on a number  $n$  of bits  $b_1, b_2, \dots, b_n$ , using two symbols corresponding respectively to a reception state and to a transmission state;
  - b) For any unspecified station  $S_i$ , during an attempt to make transmission, starting at a given identification slot;
    - b.1) for  $i$  varying from 1 to  $n$ ;
      - b.1.1) if the value of  $b_i$  is equal to the symbol corresponding to the "reception" state, the station  $S_i$  receives during the slot  $k+i-1$ :
        - if it detects a signal sent by another station it considers itself not to be chosen;
        - if it detects nothing, it continues to scan the bits  $b_i$
      - b.1.2) if the value of  $b_i$  is equal to the symbol corresponding to the transmission state, the station transmits during the slot  $k+i-1$ ;
    - c) allocating the medium to the station that has performed the step b.1) without receiving the transmission symbol.
8. The method according to claim 7, comprising a station configuration device that is separate from the stations.
9. The method according to claim 7, wherein the broadcasting medium is a radio station and wherein the stations are transmitter-receiver units.
10. The method according to claim 7, wherein the processing circuit is adapted to executing a step b.0) preliminary to the step b.1) for the transmission of the transmission symbol by the station  $S_i$  and wherein the steps b.1), b.1.1), b.1.2) may be carried out on identification slots varying from  $k+1$  to  $k+n$ .

11. The method according to claim 7, wherein the processing circuit is adapted to using binary encoding and the reception operation receive 1 when a station detects a signal coming from another station and receive 0 when it receives no signal and the send 1 operation when the station transmits a signal in a given slot.
12. The method according to claim 7, wherein the digital processing circuit is adapted to using an identification number taken in an interval  $[0, N-1]$  with  $N=2^n$ .
13. The method according to claim 12, wherein the identification numbers are made to vary by the application of a permutation of the interval.